

CLAIMS

1. A data processing system comprising a portable terminal and a terminal mount wherein the mount includes a terminal interface and processor capability for processing data received from the terminal and the terminal includes a user interface, a mount interface and processor capability sufficient only to relay user input to the mount for processing and data from the mount to the user interface.
2. A system as claimed in claim 1 further comprising a host processor, the mount including a host interface and processor capability for processing data from the host processor for relay to the terminal.
3. A system as claimed in claim 2 in which the terminal mount includes cache means for caching applications downloaded from the host via the host interface.
4. A system as claimed in claim 1 in which the mount/terminal interface comprises a wireless link.
5. A system as claimed in claim 1 in which the mount includes terminal power supply recharging means.
6. A system as claimed in claim 1 in which the mount further includes computer peripherals.
7. A system as claimed in claim 6 in which the computer peripherals comprise one or more of the group of a display, printer, a disk drive, a modem.

8. A system as claimed in claim 1 in which the mount is arranged to be provided on a vehicle.

5 9. A data processing system comprising a stand-alone data terminal, docking means for docking the terminal and a host network, the terminal including a user input and docking means interface arranged to relay user input to the mount and the mount including a terminal interface and a host interface arranged to relay the user input to the host, for processing.

10 10. A method of relaying data between a portable terminal and a base station comprising the steps of inputting data to the terminal, relaying the data to the base station with minimal processing and processing the data at the base station.

15 11. A method as claimed in claim 10 in which the terminal and base station communicate via wireless communication.

20 12. A method as claimed in claim 11 in which the information input to the terminal comprises inventorying information.

25 13. A method as claimed in claim 11 in which the information input to the terminal comprises retail related information.

30 14. A method as claimed in claim 11 in which the information input to the terminal comprises stock exchange related information.

15. A method as claimed in claim 10 further including

the step of physically connecting the terminal to the base station at intervals for data downloading and/or battery recharging.

5 16. A product information retrieval system comprising
a portable terminal arranged to receive data from one
or more data output points in a product access zone in
which the terminal is arranged to display an image of a
product to be accessed in response to data received
10 from the data output point.

17. A system as claimed in claim 16 in which the
terminal receives data from the data output point by
wireless communication.

15 18. A system as claimed in claim 16 in which the
product image corresponds to a product in a vicinity of
the terminal.

20 19. A system as claimed in claim 18 in which a
plurality of data output points are provided and the
product image is selected from products in the vicinity
of the data output point from which the terminal is
receiving data.

25 20. A system as claimed in claim 18 in which the
terminal includes a positioning system and the product
image corresponds to a product in the vicinity of the
detected position of the terminal.

30 21. A system as claimed in claim 16 in which the
terminal is arranged to display a map of the product
access zone.

22. A system as claimed in claim 21 in which the terminal is further arranged to indicate the position of the terminal on the map.

5 23. A system as claimed in claim 16 in which the product access zone comprises a retail outlet.

24. A system as claimed in claim 23 in which the terminal is arranged to display an image of a product
10 on offer.

25. A system as claimed in claim 23 in which a terminal user inputs identification information to the system.
15

26. A system as claimed in claim 25 in which the terminal is arranged to display an image of a product related to user preference derived from the user identification information.
20

27. A system as claimed in claim 16 in which the terminal further comprises one or more of the group of an optical reader or a data pen.

28. A system as claimed in claim 16 in which the terminal further includes an audio speaker.
25

29. A system as claimed in claim 28 in which the terminal further includes a voice synthesizer for relaying product or other information.
30

30. A system as claimed in claim 16 in which the terminal includes a range alarm arranged to activate if the terminal leaves the product access zone or a zone

defined related to the product access zone.

5 31.. A product information retrieval system as claimed in claim 16 further comprising a terminal docking point arranged to receive the terminal for battery charging and/or data relay.

10 32. A system as claimed in claim 23 in which the terminal is arranged to display an image of a product to be relocated together with relocation information.

15 33. A system as claimed in claim 16 in which the product access zone comprises a storage zone and a terminal is arranged to display an image of a product to be relocated together with relocation information.

20 34. A method of retrieving product information in which a portable terminal is provided in a product access zone and receives data from one or more data output points, and in which the terminal displays an image of a product to be accessed in response to data received from a data output point.

25 35. A portable data terminal for operation in an operation zone having one or more physical items located at predetermined positions in the zone wherein the data terminal comprises a communications receiver and a display arranged to display icon's representative of the physical item and/or its position in the
30 operation zone.

36. A data transfer apparatus comprising a portable data terminal and a base arranged to receive the terminal, the base and terminal including means for

mutual wireless communication, the terminal comprising data input and display means and minimum front end processing capability and the base comprising back end processing capability for processing data from the terminal.

37. An apparatus as claimed in claim 36 in which the terminal further includes one of the group of a broadcast radio receiver and a television receiver.

38. An apparatus as claimed in claim 36 in which the terminal further includes an optical reader portion, the optical reader portion being detachably connected to the terminal.

39. An apparatus as claimed in claim 36 in which the terminal further includes a motion/orientation sensor, and means for controlling operation of the terminal dependent on the motion/orientation sensed.

40. A terminal mount for mounting a portable data terminal, the mount being adapted for wireless communication with the data terminal, wherein the mount is arranged to receive or derive display format information for a terminal to be mounted thereon and configure data to be displayed at the terminal according to the display format.

41. A mount as claimed in claim 40 in which the mount configures data for display according to one of a predetermined set of format options.

42. A mount as claimed in claim 40 arranged to adapt data for display based on the number of characters per

horizontal line in the data display format.

5 43. A mount as claimed in claim 40 arranged to scale the display size of data to match the available display format.

10 44. A data communications system comprising a portable data communication device and a device mount arranged to releasably receive the device, in which the device mount includes a user identification information input and a device lock arranged to release the device on input of approved user identification information.

15 45. A system as claimed in claim 44 in which the portable data communication device comprises a cellular telephone.

20 46. A system as claimed in claim 44 in which, upon release of the device, a timer is started, and upon reinsertion of the device the time stops to allow billing to the identified user.

25 47. A system as claimed in claim 44 in which the mount is configured to carry out a status test on a device inserted therein.

30 48. A method of monitoring access to a portable data communication device wherein the portable data communication device is releasably received in a device mount, a user inputs user identification information to the mount, the mount releases the device if the identification information is approved and, simultaneously, commences the timer, the timer is stopped when the terminal is reinserted on the mount

and the identified user is billed for the timed period between release and reinsertion of the device.

49. A method as claimed in claim 48 in which the
5 device mount carries out a status check of the device when it is reinserted.

50. A data communication device including wireless
10 communication means for communicating with one or more access points to a local computer network, the device further comprising cellular telephone means for conventional telephone communication when the device is out of range of the access points to local computer network.

15 51. A goods transport tracking system comprising a communication device for a transport vehicle arranged to log receipt and/or delivery of goods and including means for wireless communication with a communication
20 network and means for creating a data file accessible via the communication network to provide receipt/delivery information.

25 52. A system as claimed in claim 51 in which the communication device comprises a communication base locatable on a vehicle and a portable data device arranged for wireless communication with the base and including means for logging receipt and delivery of goods.

30 53. A system as claimed in claim 51 in which the receipt/delivery information comprises one or more of goods received, goods delivered, goods attempted delivered.

54. A system as claimed in claim 51 in which the data file further provides current transport vehicle location information.

5 55. A system as claimed in claim 51 in which the data file creation means comprises a server arranged to create a network file.

10 56. A goods transport tracking network comprising a physical network of transfer points comprising transport vehicles and intermediate stations and a communications network, in which an interface to the communications network is provided at each transfer point and in which the passage of goods is logged at
15 each transfer point allowing transport information to be accessed at the communications network.

20 57. A network as claimed in claim 56 in which a routing table is developed at the communication network for goods to be tracked.

25 58. A network as claimed in claim 57 in which each interface comprises a base station and a portable data terminal in mutual wireless communication.

30 59. A rechargeable battery pack for an electrically powered device arranged to be received in a battery charger for recharging, in which the battery pack has predetermined recharging requirements and includes recharging control circuitry for controlling the recharge operation to meet the predetermined requirements.

60. A rechargeable battery pack as claimed in claim 59

in which a recharging requirement comprises the charging rate.

5 61. A battery recharger for receiving and recharging a rechargeable battery pack having predetermined recharging requirements and responsive to recharging control means on the battery pack to control recharge operation to meet the predetermine recharging requirements.

10

62. A battery recharger as claimed in claim 61 comprising a plurality of battery pack receiving and recharging points.

15

63. A data device arranged to communication with a communication network including an adapter module interface and an adapter module in which the adapter module carries network communication capability.

20

64. A device as claimed in claim 63 in which the adapter module comprises an adapter card.

25

65. A device as claimed in claim 63 in which the network communication capability includes at least one protocol stack and at least one network file system client.

30

66. A device as claimed in claim 65 in which the protocol stack and network file system client run on a processor in the adapter module.

67. An adapter module for a data device communicating with a communication network in which the adapter module carries network communication capability for the

device.

5 68. A portable data communication device comprising data capture means, an adapter module interface and an adapter module, wherein the adapter module includes an internal server for creating an internet site and communication means for communicating with an access point to the Internet.

10 69. A terminal as claimed in claim 68 in which the adapter module comprises an adapter card.

15 70. An adapter card for a portable communication device, the adapter card comprising a device interface, an internal server for creating a network file for data captured by the device and a network interface.

20 71. A power pack for cooperation with a device to power the device, the power pack comprising rechargeable cells, charging circuitry and a connector for connecting to a power supply to recharge the cells.

25 72. A power pack as claimed in claim 71 in which the charging circuitry comprises one or more of the group of: AC/DC conventor, charge electronics, gas gage.

73. A power pack as claimed in claim 71 in which the rechargeable cells are replaceable.

30 74. An adapter for a battery charging system including a battery pack and a recharger in which the adapter includes a battery pack interface, a recharger interface and charging control circuitry.